



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL
Lab Services - Jackson Regional Lab
Jackson, TN 38301
731-426-0686

TDH: Lab Services KRL
Lab Services - Knoxville Regional Lab
Knoxville, TN 37920
865-549-5201

TDH: Lab Services NCL
Lab Services - Nashville Central Lab
Nashville, TN 37243
615-262-6300

Sent To: Geoff Klein
TDEC-DWS
200 East Race St
Knoxville, TN 37763

Lab ID: N00004474
Nashville Central Laboratory

Sampling Agency: TDEC: Division of Water Supply

Billing Code: 327.39-12

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.


Analytical Supervisor

Lab-Sample Number: N00004474001

Project Name:

Sample Description: FINISH

Sampler Project Name:

Project Site No.: ROCKWOOD WTP

Station No.:

Date/Time Collected: 05/04/2009 10:15

Sampler's Name: BRANDY LONG

County: ROANE - 73

Sample Matrix: Water

EFO: Knoxville

Sampling Agency: TDEC-DWS

Billing Code: 327.39-12

Send Report To: TDEC-DWS

Agency Invoiced: TDEC-DWS

Priority Date:

Date/Time Received: 05/04/2009 12:40

Received By: P Singh

Field Determinations

pH:

Chlorine, residual:

Conductivity:

Temperature:

Dissolved Oxygen:

Other:

Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	60	mg/L	3.8	10	M Chen	5/5/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	51	mg/L	0.7	1	M Chen	5/5/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004474002
Project Name:
Sample Description: RAW
Sampler Project Name:
Project Site No.: ROCKWOOD WTP
Station No.:
Date/Time Collected: 05/04/2009 10:20
Sampler's Name: BRANDY LONG
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/04/2009 12:40
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Alkalinity, Total			METHOD: EPA 310.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	68	mg/L	3.8	10	M Chen	5/5/2009

TEST: Hardness, Calcium			METHOD: SM 3500-Ca D			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	51	mg/L	0.7	1	M Chen	5/5/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: N00004474003
Project Name:
Sample Description: FINISH
Sampler Project Name:
Project Site No.: KINGSTON WTP
Station No.:

Date/Time Collected: 05/04/2009 10:45
Sampler's Name: BRANDY LONG
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/04/2009 12:40
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	56	mg/L	3.8	10	M Chen	5/5/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	49	mg/L	0.7	1	M Chen	5/5/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: N00004474004

Project Name:

Sample Description: RAW

Sampler Project Name:

Project Site No.: KINGSTON WTP

Station No.:

Date/Time Collected: 05/04/2009 10:50

Sampler's Name: BRANDY LONG

County: ROANE - 73

Sample Matrix: Water

EFO: Knoxville

Sampling Agency: TDEC-DWS

Billing Code: 327.39-12

Send Report To: TDEC-DWS

Agency Invoiced: TDEC-DWS

Priority Date:

Date/Time Received: 05/04/2009 12:40

Received By: P Singh

Field Determinations

pH:

Chlorine, residual:

Conductivity:

Temperature:

Dissolved Oxygen:

Other:

Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	57	mg/L	3.8	10	M Chen	5/5/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	48	mg/L	0.7	1	M Chen	5/5/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

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615-262-6300

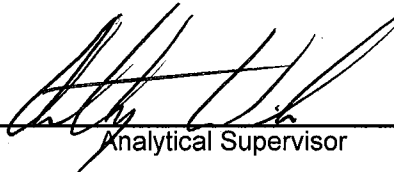
Sent To: Geoff Klein
TDEC-DWS
200 East Race St
Knoxville, TN 37763

Lab ID: N00004474
Nashville Central Laboratory

Sampling Agency: TDEC: Division of Water Supply

Billing Code: 327.39-12

This is to certify that the following results were determined using good laboratory practices and in accordance with federal or state approved methodologies.



Analytical Supervisor

Lab-Sample Number: N00004474001
Project Name:
Sample Description: FINISH
Sampler Project Name:
Project Site No.: ROCKWOOD WTP
Station No.:
Date/Time Collected: 05/04/2009 10:15
Sampler's Name: BRANDY LONG
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/04/2009 12:40
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/05/2009				A Bass	5/5/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Arsenic	U	µg/L	0.93	5	A Wilson	5/5/2009
Barium	21	µg/L	2.5	5	A Wilson	5/5/2009
Beryllium	U	µg/L	0.11	1	A Wilson	5/5/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/5/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/5/2009
Cobalt	0.14J	µg/L	0.04	1	A Wilson	5/5/2009
Lead	U	µg/L	0.10	1	A Wilson	5/5/2009
Manganese	0.47J	µg/L	0.42	1	A Wilson	5/5/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/5/2009
Thallium	0.62J	µg/L	0.03	1	A Wilson	5/5/2009
Vanadium	U	µg/L	3.4	5	A Wilson	5/5/2009

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	5/7/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: N00004474002
Project Name:
Sample Description: RAW
Sampler Project Name:
Project Site No.: ROCKWOOD WTP
Station No.:
Date/Time Collected: 05/04/2009 10:20
Sampler's Name: BRANDY LONG
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/04/2009 12:40
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/05/2009				A Bass	5/5/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Arsenic	U	µg/L	0.93	5	A Wilson	5/5/2009
Barium	22	µg/L	2.5	5	A Wilson	5/5/2009
Beryllium	U	µg/L	0.11	1	A Wilson	5/5/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/5/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/5/2009
Cobalt	0.14J	µg/L	0.04	1	A Wilson	5/5/2009
Lead	0.24J	µg/L	0.10	1	A Wilson	5/5/2009
Manganese	17	µg/L	0.42	1	A Wilson	5/5/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/5/2009
Thallium	0.16J	µg/L	0.03	1	A Wilson	5/5/2009
Vanadium	U	µg/L	3.4	5	A Wilson	5/5/2009

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	5/7/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: N00004474003
Project Name:
Sample Description: FINISH
Sampler Project Name:
Project Site No.: KINGSTON WTP
Station No.:
Date/Time Collected: 05/04/2009 10:45
Sampler's Name: BRANDY LONG
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/04/2009 12:40
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/05/2009				A Bass	5/5/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Arsenic	U	µg/L	0.93	5	A Wilson	5/5/2009
Barium	24	µg/L	2.5	5	A Wilson	5/5/2009
Beryllium	U	µg/L	0.11	1	A Wilson	5/5/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/5/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/5/2009
Cobalt	0.079J	µg/L	0.04	1	A Wilson	5/5/2009
Lead	U	µg/L	0.10	1	A Wilson	5/5/2009
Manganese	0.57J	µg/L	0.42	1	A Wilson	5/5/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/5/2009
Thallium	0.082J	µg/L	0.03	1	A Wilson	5/5/2009
Vanadium	U	µg/L	3.4	5	A Wilson	5/5/2009

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	5/7/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: N00004474004
Project Name:
Sample Description: RAW
Sampler Project Name:
Project Site No.: KINGSTON WTP
Station No.:
Date/Time Collected: 05/04/2009 10:50
Sampler's Name: BRANDY LONG
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/04/2009 12:40
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/05/2009				A Bass	5/5/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Arsenic	2.8J	µg/L	0.93	5	A Wilson	5/5/2009
Barium	37	µg/L	2.5	5	A Wilson	5/5/2009
Beryllium	0.12J	µg/L	0.11	1	A Wilson	5/5/2009
Cadmium	U	µg/L	0.41	1	A Wilson	5/5/2009
Chromium	U	µg/L	2.0	5	A Wilson	5/5/2009
Cobalt	0.60J	µg/L	0.04	1	A Wilson	5/5/2009
Lead	1.4	µg/L	0.10	1	A Wilson	5/5/2009
Manganese	26	µg/L	0.42	1	A Wilson	5/5/2009
Selenium	U	µg/L	1.3	5	A Wilson	5/5/2009
Thallium	0.13J	µg/L	0.03	1	A Wilson	5/5/2009
Vanadium	U	µg/L	3.4	5	A Wilson	5/5/2009

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	5/7/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected